

200312102-1

10/789,963

IN THE CLAIMS:

The status and content of each claim follows.

1-47. (cancelled)

48. (currently amended) A print medium having a microporous coating comprising:

a substrate which serves as a base of said print medium;

a first microporous layer comprising a first binder deposited as a liquid on said substrate; and

a fusible latex layer deposited over said first microporous layer, wherein said fusible latex layer is microporous and includes particles comprising a hard core material and a soft shell material;

wherein said latex exhibits self-adhesive properties at a room temperature such that said latex layer remains in place on said first microporous layer without requiring a second binder and without being fused.

49. (previously presented) The microporous coating of claim 48, wherein said latex layer is ink permeable and permits the transmission of ink through said latex layer to said first microporous layer prior to said fusible latex layer being fused.

50. (cancelled)

200312102-1

10/789,963

51. (previously presented) The microporous coating of claim 49, wherein, after a printing process in which ink has passed through said latex layer, said latex is for forming a fused, continuous transparent film by the application of thermal energy or pressure.

52. (original) The microporous coating of claim 51, wherein said hard core material exhibits a glass transition temperature above 80 degrees Celsius and said soft shell material exhibits a glass transition temperature below 70 degrees Celsius.

53. (original) The microporous coating of claim 52, wherein said hard core material comprises one of poly(methylmethacrylate), poly(styrene), poly(p-methylstyrene), poly(t-butylacrylamide), poly(styrene-co-methylmethacrylate), poly(styrene-co-t-butylacrylamide), poly(methylmethacrylate-co-t-butylacrylamide), or homopolymers derived from p-cyanophenyl methacrylate, pentachlorophenyl acrylate, methacrylonitrile, isobornyl methacrylate, phenyl methacrylate, acrylonitrile, isobornyl acrylate, p-cyanophenyl acrylate, 2-chloroethyl acrylate, 2-chloroethyl methacrylate, 2-naphthyl acrylate, n-isopropyl acrylamide, 1-fluoromethyl methacrylate, isopropyl methacrylate, or 2-hydroxypropyl methacrylate.

54. (cancelled)

55. (original) The microporous coating of claim 52, wherein said soft shell material comprises a cationic monomer or a salt of a cationic monomer.

200312102-1

10/789,963

56. (original) The microporous coating of claim 55, wherein said soft shell material comprises one of poly(n-butyl acrylate co-trimethylammoniumethyl acrylate), poly(2-ethylhexyl acrylate co-trimethylammoniumethyl acrylate) poly(methoxyethylacrylate co-trimethylammoniumethyl acrylate), poly(ethoxy-ethylacrylate co-trimethylammoniumethyl acrylate), poly(n-butylacrylate-co-trimethylammoniumethyl acrylate), poly(n-butylacrylate-co-vinylbenzyltrimethylammonium chloride), poly (n-ethylhexylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniumethyl acrylate), poly (n-butylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniumethyl acrylate), poly(n-ethylhexylacrylate -co-vinylbenzyltrimethylammonium chloride), poly(n-methoxyethylacrylate -co-vinylbenzyltrimethylammonium chloride), or poly(n-ethoxyethylacrylate -co-vinylbenzyltrimethylammonium chloride).

57. (original) The microporous coating of claim 49, wherein said latex further comprises a coalescing agent.

58. (previously presented) The microporous coating of claim 57, wherein said coalescing agent comprises one of ethylene glycol, propylene glycol, hexylene glycol, ester of ethylene glycol, propylene glycol, hexylene glycol, 2-butoxyethanol, 2,2,4-trimethylpentane diol monoisobutyrate, diisobutyl esters of a mixture of diacids, butyl cellulose, 2-(2-butoxyethoxy)ethanol, 2-butoxyethanol, diisobutyl succinate, diisobutyl glutarate, diisobutyl adipate.

59-70. (cancelled)

200312102-1

10/789,963

71. (previously presented) The microporous coating of claim 52, wherein said soft shell material comprises one of a homo- or copolymer derived from n-butyl acrylate, n-ethylacrylate, 2-ethylhexylacrylate, methoxyethylacrylate, methoxyethoxy-ethylacrylate, ethoxyethylacrylate, ethoxyethoxyethylacrylate, 2-ethylhexyl-methacrylate, n-propylacrylate, hydroxyethylacrylate, tetrahydrofufuryl acrylate, cyclohexylacrylate, iso-decylacrylate, n-decylmethacrylate, n-propylacrylate, vinylacetate, 2-(N,N-Dimethylamino)ethyl methacrylate, 2-N-Morpholinoethyl acrylate, or 3-Dimethylaminoneopentyl acrylate.

72. (previously presented) The microporous coating of claim 52, wherein said soft shell material comprises one of tetrahydrofufuryl acrylate, cyclohexylacrylate, iso-decylacrylate, n-decylmethacrylate, vinylacetate, 2-(N,N-Dimethylamino)ethyl methacrylate, 2-N-Morpholinoethyl acrylate, or 3-Dimethylaminoneopentyl acrylate.

73-79. (cancelled)

80. (new) The microporous coating of claim 48, wherein core material comprises more than 50% by weight of said particles.

81. (new) The microporous coating of claim 48, wherein core material comprises polystyrene and is 50% by weight of said particles, and said shell material comprises n-ethylhexylacrylate that is 40% by weight of said particles and 2-hydroxyethylacrylate that is 10% by weight of said particles.

200312102-1

10/789,963

82. (new) The microporous coating of claim 48, wherein core material comprises polystyrene and is 70% by weight of said particles, and said shell material comprises ethoxyethylacrylate and is 30% by weight.

83. (new) The microporous coating of claim 48, wherein core material comprises Polymethylmethacrylate and is 70% by weight of said particles, and said shell material comprises 2-hydroxyethylacrylate and is 30% by weight.

84. (new) The microporous coating of claim 48, wherein core material comprises polystyrene and is 40% by weight of said particles, and said shell material comprises n-ethylhexylacrylate that is 40% by weight of said particles and 2-hydroxyethylacrylate that is 20% by weight of said particles.

85. (new) The microporous coating of claim 48, wherein said first microporous layer comprises aluminum.

86. (new) The microporous coating of claim 48, wherein said particles are smaller than 200 nm.

87. (new) The microporous coating of claim 48, wherein said shell material has a Tg from above 20° C up to 70° C

88. (new) The microporous coating of claim 48, wherein said fusible latex layer is coating at 1 to 2 grams per square meter on said first microporous layer.

200312102-1

10/789,963

89. (new) The microporous coating of claim 48, wherein said first microporous layer is 10 to 50 grams per square meter and said fusible latex layer is 0.1 to 10 grams per square meter.

90. (new) The microporous coating of claim 48, wherein said shell material comprises a coalescing agent that lowers the Tg of a shell of said particles.